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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,754	12/26/2000	Andrew P. Kramer	279.166US1	4508

21186 7590 02/11/2003  
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EXAMINER

OROPEZA, FRANCES P

ART UNIT	PAPER NUMBER
3762	

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/748,754	KRAMER ET AL.
	Examiner Frances P. Oropeza	Art Unit 3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 December 2002.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 is unclear because it appears “upon rate chamber events” should be --upon the rate chamber events--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. Claims 1-23 stand rejected under 35 U.S.C. 102(b) as being anticipated by Thompson et al. (US 5902324) for the reasons of record (Paper No. 7 – paragraph 3) and the discussion in paragraph 4 of this action.

### *Claim Rejections - 35 USC § 103*

3. Claim 24 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (US 5902324) in view of Kieval et al. (US 5507782) for the reasons of record (Paper No. 7 – paragraph 6) and the discussion in paragraph 4 of this action.

### *Response to Amendment*

4. The prior art of Thompson et al. and Kieval et al is discussed below.

#### Thompson et al.

The Applicant’s arguments relative to Thompson et al., filed 12/26/02, have been fully considered but they are not persuasive.

As to claims 1 and 11, the Applicant argues specific limitations of claims 1 and 11 are not taught by Thompson et al.. The Examiner finds the limitations are taught by Thompson et al.:

Thompson et al. disclose synchronized heart chamber pacing (c 7, ll 16-21; c 24, ll 8-15) where, in the asymmetric mode, the rate chamber controls the timing of the pacing escape interval (c 7, ll 60-67). Based upon events in the rate chamber and upon expiration of an escape interval, the synchronized chamber is paced unless the conducted depolarization wave is sensed during a synchronized chamber protection period (read as a particular CDW time/period when a “CDW INHIBIT signal” is generated based on detection of a conducted depolarization in the synchronization chamber (c 7, ll 8-13; c 8, ll 11-15; c 15, ll 28-40)), and the pace is inhibited (c 8, ll 11-15) while the escape interval continues to run (c 15, ll 32-34). Single and dual chamber, symmetric and asymmetric, right / left / atrial / ventricular pacing configurations are disclosed (c 8, ll 28-40).

As to claims 21-23, the Applicant argues specific limitations, of claim 21 are not taught by Thompson et al.. The term asynchronous pacing needs to be clearly defined. Asynchronous pacing, according to the instant specification, includes pacing created to address cardiac disease, where the pacing therapy desynchronizes the contraction sequences in response to the abnormal functioning of the heart chamber(s) (page 10, lines 10-17). The Examiner finds the specific limitations of claim 21-23 questioned by the Applicant are taught by Thompson et al.: Thompson et al. disclose asynchronous pacing using asymmetric pacing where a single chamber, the rate chamber, controls the timing of the escape interval for the paced sites (c 7, ll 60-67; c 24, ll 15-27). The pacing and sensing channels are adapted by modifying or disabling components of the control circuitry (c 13, ll 54-63) to treat cardiac disease induced conduction disturbances in a single chamber or between chambers to restore the normal depolarization sequence (c 9, ll 58-63; c 10, l 52 – c 11, l 7; c 17, ll 11-43; c 24, ll 15-27). Based upon events in the rate chamber

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and upon expiration of an escape interval, the synchronized chamber is paced unless the conducted depolarization wave is sensed during a synchronized chamber protection period (read as a particular CDW time/period when a “CDW INHIBIT signal” is generated based on detection of a conducted depolarization in the synchronization chamber (c 7, ll 8-13; c 8, ll 11-15; c 15, ll 28-40)), and the pace is inhibited (c 8, ll 11-15) while the escape interval continues to run (c 15, ll 32-34). Single and dual chamber, symmetric and asymmetric, right / left / atrial / ventricular pacing configurations are disclosed (c 8, ll 28-40).

As to claim 24, the Applicant argues the limitations of claim 24 are not taught by Thompson et al.. The Examiner acknowledged Thompson et al. did not teach the limitations of claim 24 in the previous office action (Paper No. 7 – paragraph 6), hence the 35 U.S.C. 103(a) rejection of claim 24 (Thompson et al. in view of Kievel et al.) was established. Kieval does disclose the limitations of claim 24: Kieval et al. disclose a pacemaker with rate responsive pacing using a piezo electric sensor (316), read as an exertion level sensor, to monitor patient activity (c 10, ll 25-30).

Kievel et al. – 102(b)

The Applicant’s arguments relative to the 35 U.S.C. 102(b) rejection of claims 1, 2, 6, 9, 11, 12, 16, 19 and 21-24 as being clearly anticipated by Kieval et al. are convincing, hence the rejection is withdrawn.

*Conclusion*

**THIS ACTION IS MADE FINAL.** The Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza whose telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Thursday from 6 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4520 for regular communication and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Frances P. Oropeza  
Patent Examiner  
Art Unit 3762

4/1/03



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SUPERVISORY PATENT EXAMINER  
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